

Emotional Design in Architecture

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I. ABSTRACT

I.1. BACKGROUND

Architecture and Neuroscience were two separate disciplines, until it was found that the brain is constantly adapted to the environments we are living in. Focusing on healthy environments, a well-designed built habitat with principles of neuroscience, reduces patient stay for example, and even plays part in treatment such as retrieving old memory and brain stimuli. **Neuroscientists** study behavior and brain. In addition, they study sensation and perception, how the brain influences decision making, emotion. For example how we interact with our environment and how we navigate through it, how we hear, taste, and even smell things, how we store the information received and how we can recall the same information, how we react to various situations for example fear and how we evaluate the results of our actions. As seen all these are *affected by environmental designs*. This therefore requires **Architects** to use these neuroscience principles to input them in their designs. Learning how our brain works with perception will lead to new developments on behalf of users in design, and more specifically Architecture. Our **Environment** explains the different experiences that we receive; for examples, people in *rural settlements* have certain mindfulness that people in *urban areas* do not possess. It is therefore of paramount importance for designers to understand the effect various designs have on our emotions. For example, new treatments combined with architecture approaches give individuals a pleasant stay, shortens the healing.

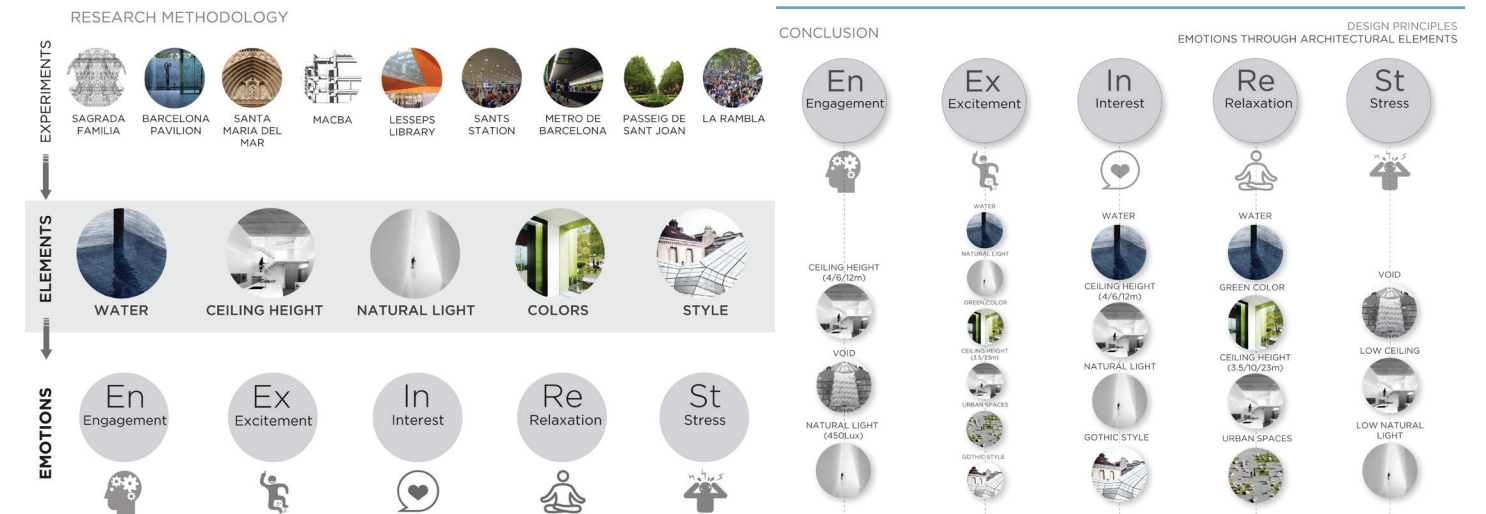
I.2. METHODOLOGY / PROCEDURE

Over the past years, several studies have been, done focusing their attention on the **impacts of architecture on emotions**. This research focuses on **experiences** done in **Architectural** and **Urban** settings in the city of **Barcelona**. In this experiment, **two subjects** essentially **brain mapped** by use of portable **EEG** neuro-headset connected to its software on the laptop, which analyzed brainwaves in the **brain**, so that it could detect different degrees of emotions. In addition, this machine has a capability of measuring the **affect of the environment** on emotions. Therefore, it has become more accessible to measure the architectural impacts on emotions. This paper aims at explaining different effects of **Architectural Elements** on special Emotions. It also targets in conclusion to be able to design our emotions, through architectural elements.

The choosing in the methodology used **designs that activate distinctive emotional expressions** that can be felt through changeable **architectural elements**. The various elements trigger certain emotions. The **elements** used include *Water, Ceiling Height, Natural Light, Colors and Styles*. These **design elements** provokes **emotions** of *Engagement, Excitement, Interest, Relaxation and Stress*.



OUTCOME DATA: EMOTIONS IN PERCENTAGE



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